# Imtisal Akhtar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2375450/publications.pdf

Version: 2024-02-01

| 53 | 1,756 | 236925 | 276875 |
|---|---|---|---|
| papers | citations | 25 h-index | 41 g-index |

| 53 | 53 | 53 | 2895 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | High-mobility and air-stable single-layer WS2 field-effect transistors sandwiched between chemical vapor deposition-grown hexagonal BN films. Scientific Reports, 2015, 5, 10699. | 3.3 | 258 |
| 2 | Atomic force microscopy and spectroscopy. Reports on Progress in Physics, 2008, 71, 016101. | 20.1 | 118 |
| 3 | Influence of an Al2O3 interlayer in a directly grown graphene-silicon Schottky junction solar cell. Carbon, 2018, 132, 157-164. | 10.3 | 78 |
| 4 | n-MoS<sub>2</sub>/p-Si Solar Cells with Al<sub>2</sub>O<sub>3</sub> Passivation for Enhanced Photogeneration. ACS Applied Materials & Interfaces, 2016, 8, 29383-29390. | 8.0 | 77 |
| 5 | Synthesis and characterization of large-area and continuous MoS<sub>2</sub>atomic layers by RF magnetron sputtering. Nanoscale, 2016, 8, 4340-4347. | 5.6 | 74 |
| 6 | Influence of removing PMMA residues on surface of CVD graphene using a contact-mode atomic force microscope. RSC Advances, 2017, 7, 6943-6949. | 3.6 | 68 |
| 7 | Enhanced photoresponse of ZnO quantum dot-decorated MoS<sub>2</sub> thin films. RSC Advances, 2017, 7, 16890-16900. | 3.6 | 59 |
| 8 | Supercapacitors based on Ti3C2Tx MXene extracted from supernatant and current collectors passivated by CVD-graphene. Scientific Reports, 2021, 11, 649. | 3.3 | 54 |
| 9 | Thickness-dependent efficiency of directly grown graphene based solar cells. Carbon, 2019, 148, 187-195. | 10.3 | 49 |
| 10 | Multifunctional and high-performance GeSe/PdSe<sub>2</sub>heterostructure device with a fast photoresponse. Journal of Materials Chemistry C, 2020, 8, 4743-4753. | 5.5 | 47 |
| 11 | Micro-to-nano-scale deformation mechanisms of a bimodal ultrafine eutectic composite. Scientific Reports, 2014, 4, 6500. | 3.3 | 46 |
| 12 | Polymer-dispersed liquid-crystal-based switchable glazing fabricated via vacuum glass coupling. RSC Advances, 2020, 10, 32225-32231. | 3.6 | 41 |
| 13 | Asymmetric electrode incorporated 2D GeSe for self-biased and efficient photodetection. Scientific Reports, 2020, 10, 9374. | 3.3 | 38 |
| 14 | Application of Titanium-Carbide MXene-Based Transparent Conducting Electrodes in Flexible Smart Windows. ACS Applied Materials & Interfaces, 2021, 13, 40976-40985. | 8.0 | 37 |
| 15 | Acrylate-assisted fractal nanostructured polymer dispersed liquid crystal droplet based vibrant colored smart-windows. RSC Advances, 2019, 9, 12645-12655. | 3.6 | 36 |
| 16 | High mobility ReSe<sub>2</sub> field effect transistors: Schottky-barrier-height-dependent photoresponsivity and broadband light detection with Co decoration. 2D Materials, 2020, 7, 015010. | 4.4 | 36 |
| 17 | Effect of Annealing in Ar/H<sub>2</sub> Environment on Chemical Vapor Deposition-Grown Graphene Transferred With Poly (Methyl Methacrylate). IEEE Nanotechnology Magazine, 2015, 14, 70-74. | 2.0 | 34 |
| 18 | WSe<sub>2</sub> Homojunction pâ€“n Diode Formed by Photoinduced Activation of Mid-Gap Defect States in Boron Nitride. ACS Applied Materials & Interfaces, 2020, 12, 42007-42015. | 8.0 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | NIR self-powered photodetection and gate tunable rectification behavior in 2D GeSe/MoSe2 heterojunction diode. Scientific Reports, 2021, 11, 3688. | 3.3 | 34 |
| 20 | Low-temperature high-resolution magnetic force microscopy using a quartz tuning fork. Applied Physics Letters, 2005, 87, 103103. | 3.3 | 31 |
| 21 | Highly aligned carbon nanotubes and their sensor applications. Nanoscale, 2020, 12, 21447-21458. | 5.6 | 31 |
| 22 | Ultravioletâ€Lightâ€Induced Reversible and Stable Carrier Modulation in MoS<sub>2</sub> Fieldâ€Effect Transistors. Advanced Functional Materials, 2014, 24, 7125-7132. | 14.9 | 30 |
| 23 | Combinatorial Influence of Bimodal Size of B2 TiCu Compounds on Plasticity of Ti-Cu-Ni-Zr-Sn-Si Bulk Metallic Glass Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2376-2381. | 2.2 | 27 |
| 24 | High performance complementary WS<sub>2</sub> devices with hybrid Gr/Ni contacts. Nanoscale, 2020, 12, 21280-21290. | 5.6 | 27 |
| 25 | Optoelectronics of Multijunction Heterostructures of Transition Metal Dichalcogenides. Nano Letters, 2020, 20, 1934-1943. | 9.1 | 27 |
| 26 | Self-standing SnS nanosheet array: a bifunctional binder-free thin film catalyst for electrochemical hydrogen generation and wastewater treatment. Dalton Transactions, 2021, 50, 12723-12729. | 3.3 | 27 |
| 27 | Effect of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXenes etched at elevated temperatures using concentrated acid on binder-free supercapacitors. RSC Advances, 2020, 10, 41837-41845. | 3.6 | 26 |
| 28 | Study of Grains and Boundaries of Molybdenum Diselenide and Tungsten Diselenide Using Liquid Crystal. Nano Letters, 2017, 17, 1474-1481. | 9.1 | 24 |
| 29 | Solar cell based on vertical graphene nano hills directly grown on silicon. Carbon, 2020, 164, 235-243. | 10.3 | 23 |
| 30 | Gate Tunable Transport in Graphene/MoS2/(Cr/Au) Vertical Field-Effect Transistors. Nanomaterials, 2018, 8, 14. | 4.1 | 22 |
| 31 | Van der Waals heterojunction diode composed of WS<sub>2</sub>flake placed on p-type Si substrate. Nanotechnology, 2018, 29, 045201. | 2.6 | 21 |
| 32 | Effect of the Photoinitiator Concentration on the Electro-optical Properties of Thiolâ€“Acrylate-Based PDLC Smart Windows. ACS Applied Energy Materials, 2022, 5, 6986-6995. | 5.1 | 21 |
| 33 | Gate Modulation of the Spin-orbit Interaction in Bilayer Graphene Encapsulated by WS2 films. Scientific Reports, 2018, 8, 3412. | 3.3 | 20 |
| 34 | A facile route to a high-quality graphene/MoS<sub>2</sub> vertical field-effect transistor with gate-modulated photocurrent response. Journal of Materials Chemistry C, 2017, 5, 2337-2343. | 5.5 | 19 |
| 35 | Twist-Angle-Dependent Optoelectronics in a Few-Layer Transition-Metal Dichalcogenide Heterostructure. ACS Applied Materials & Interfaces, 2019, 11, 2470-2478. | 8.0 | 19 |
| 36 | Real-time atomic force microscopy using mechanical resonator type scanner. Review of Scientific Instruments, 2008, 79, 103703. | 1.3 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Operation Protocols To Improve Durability of Protonic Ceramic Fuel Cells. ACS Applied Materials & Interfaces, 2019, 11, 457-468. | 8.0 | 14 |
| 38 | Stretchable Sensor Made of MWCNT/ZnO Nanohybrid Particles in PDMS. Advanced Materials Technologies, 2020, 5, 2000229. | 5.8 | 14 |
| 39 | Studies on directly grown few layer graphene processed using tape-peeling method. Carbon, 2020, 158, 749-755. | 10.3 | 12 |
| 40 | Highâ€Efficiency Supercapacitor Electrodes of <scp>CVD</scp>â€grown Graphenes Hybridized with Multiwalled Carbon Nanotubes. Bulletin of the Korean Chemical Society, 2015, 36, 2111-2115. | 1.9 | 11 |
| 41 | Effect of additional HfO<sub>2</sub> layer deposition on heterojunction câ€Si solar cells. Energy Science and Engineering, 2018, 6, 706-715. | 4.0 | 10 |
| 42 | Visualizing Degradation of Black Phosphorus Using Liquid Crystals. Scientific Reports, 2018, 8, 12966. | 3.3 | 10 |
| 43 | Radial alignment of carbon nanotubes for directional sensing application. Composites Part B: Engineering, 2021, 222, 109038. | 12.0 | 10 |
| 44 | Three-dimensional atomic force microscopy for ultra-high-aspect-ratio imaging. Applied Surface Science, 2019, 469, 582-592. | 6.1 | 9 |
| 45 | QUARTZ CRYSTAL RESONATOR BASED SCANNING PROBE MICROSCOPY. Modern Physics Letters B, 2005, 19, 1303-1322. | 1.9 | 8 |
| 46 | Mechanical properties of rippled structure in suspended stacks of graphene. Journal of Applied Physics, 2010, 108, . | 2.5 | 7 |
| 47 | Dynamics of liquid crystal on hexagonal lattice. 2D Materials, 2018, 5, 045021. | 4.4 | 5 |
| 48 | Modulation of Magnetoresistance Polarity in BLG/SL-MoSe2 Heterostacks. Nanoscale Research Letters, 2020, 15, 136. | 5.7 | 4 |
| 49 | Effect of Poly(2-ethyl-2-oxazoline) on Multi-Walled Carbon Nanotubes Reinforced Poly(vinyl alcohol) Composites. Polymers and Polymer Composites, 2010, 18, 251-256. | 1.9 | 3 |
| 50 | Nanographene device fabrication using atomic force microscope. Micro and Nano Letters, 2013, 8, 422-425. | 1.3 | 3 |
| 51 | Raman spectroscopic image analysis on micropatterned graphene. Micro and Nano Letters, 2013, 8, 362-365. | 1.3 | 3 |
| 52 | General algorithm and method for scanning a via hole by using critical-dimension atomic force microscopy. Journal of the Korean Physical Society, 2014, 64, 1643-1647. | 0.7 | 3 |
| 53 | Quartz tuning fork based three-dimensional topography imaging for sidewall with blind features. Ultramicroscopy, 2020, 210, 112916. | 1.9 | 1 |